DESCRIPTIONS OF TWO SUPPOSED NEW SPECIES OF MICE FROM COSTA RICA AND MEXICO, WITH REMARKS ON HESPEROMYS MELANOPHRYS OF COUES.

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Having recently had in hand a small collection of mammals from Costa Rica for identification, I found it desirable to examine in that connection as much material as possible from Central America and Mexico bearing upon the Costa Rican Muridæ. In response to my solicitation, Mr. Frederick W. True, curator of mammals in the U. S. National Museum, kindly secured for me the use of the specimens in the collection under his charge. They not only were of great assistance in the work in hand, but proved to include two forms apparently new to science.

Oryzomys talamancæ, sp. nov.

Pelage short, thick, soft, velvety. Above, russet-brown medially, mixed with blackish brown, passing gradually into clear yellow-brown on the sides; beneath, grayish white, the hairs being white or faintly yellowish white at the tips and gray beneath the surface, the basal gray portion showing through the surface, giving the effect of grayish white with a faint yellowish east. Cheeks, sides of the neck, and flanks deep yellowish brown or golden cinnamon. Sides of the muzzle, dull soiled grayish white. Upper surface of fore and hind feet, dull pale yellowish gray, very scantily haired, and the toes nearly naked, except at the base of the claws. Soles entirely naked, tubercles 6. Ears large, blackish, naked. Tail about as long as head and body, naked, blackish above, dark brown below, hence indistinctly bicolored.

Length (approximate from skins), head and body, 114.3 millimetres (4.50 inches); tail, 114.3 millimetres (4.50 inches); hind foot(with claws), 30.8 millimetres (1.15 inches); ear, from erown, 13.7 millimetres (.54 inch); muzzle to eye, 17.8 millimetres (.70 inch).

Skull in general form very similar to that of *Gryzomys palustris*, but much smaller. Basal length, 28.5 millimetres (1.12 inches); total length, 31.2 millimetres (1.23 inches); palatal length, 16 millimeters (.63 inch); greatest breadth, 15.8 millimetres (.63 inch); least interorbital breadth,

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5.3 millimetres (.21 inch.); nasals, 12.7 millimetres (.50 inch); upper molar series, 5.1 millimetres (.20 inch). (Lower jaw lacking.)

Type $\frac{12}{22742}$, U. S. National Museum, $\hat{\varepsilon}$ ad. Talamanca, Prof. W. M. Gabb.

This species is based on two specimens, skins, in the Gabb collection, belonging to the U. S. National Museum. One still retains the skull; from the other (the type) the skull has been removed, but, unfortunately, lacks the lower jaw. The two skins differ somewhat in coloration, and apparently represent different seasons of the year, one being in rather fuller and darker pelage than the other.

On the back of the labels I find written in pencil, "Near or =H. laticeps Lund," a species based on specimens from Lagoa, Santa Brazil. To say nothing of the wide separation of the habitats of the two, the present species is very much smaller than H. laticeps, and the resemblance in coloration is by no means close. Mr. Oldfield Thomas's Hesperomys (Oryzomys) laticeps var. nitidus, from central Peru (see P. Z. S., 1884, p. 452, pl. xlii, fig. 1), is also much larger than the present species, and evidently very different in coloration, as he speaks of its "dark, rich, rufous color."

Hesperomys melanophrys Coues.

Hesperomys (Vesperimus) melanophrys Cones, Proc. Acad. Nat. Sci., Phila., 1874, p. 181; Mon. N. Am. Roden., 1877, p. 102 (in part only).

Dr. Coues in describing his Hesperomys (Vesperimus) melanophrys considered it as doubtfully distinct from H. mexicanus of De Saussure. An actual comparison of the types of the two species, which, through the kindness of Dr. C. Hart Merriam, I recently had the opportunity of making, in company with himself and Mr. F. W. True, at the U. S. National Museum, has shown that they are not at all closely related. I have since then been able to study more critically the specimens six in all—referred by Dr. Coues to this species in his final notice of H. melanophrys. His original description of it (Proc. Acad. Nat. Sci. Phila., 1874, p. 181) refers only to the single type specimen from which it was described; his later notice (Mon. N. Am. Roden., p. 102) refers in part to other specimens, only the first three of which (given in Table XXIX, l. c.), his diagnosis, and the main body of the article relate to H. melanophrys. In a note to the article as originally prepared he provisionally referred three other specimens to H. melanophrys, though recognizing that they presented many points of difference, respecting which he says:

Since writing the preceding, we have examined three other specimens from Tehnantepec, which, if the same, as the types of melanophrys, lessen the chances that the latter is different from mexicanus [De Saus.]. But they differ in many respects from the specimens just enumerated [the three originally referred to melanophrys], being so very much smaller that we can not satisfy ourselves of their identity. The tail only exceeds the body in one specimen, and here only a little; in the others, it is about as long, relatively, as De Saussure gives for mexicanus. That these specimens are not immature is shown by the fact that one of them is a nursing female. In color,

they are almost precisely like the foregoing, but do not show the black ring round the eye, nor the dusky spot at the base of the metatarsus. One of them is pure white below; another is grayish (it looks as if soiled); while the third has the faintest possible fulvous tinge all along the under parts." He says further: "Much more material than that now in our possession will be required to determine the limits of variation of this large, gray, leucopus-like mouse of Mexico, and fix the species upon secure basis.

In his three specimens originally referred to H. melanophrys (as shown by his tables of measurements), the length of head and body averages 4.02 inches and the tail 4.83, as against 3.20 and 3.10 respectively in the other three specimens mentioned in the above quotation. This difference, with the differences in coloration pointed out by Dr. Cones himself, clearly shows that the latter have no close relationship to H. melanophrys, but are strictly of the leucopus type.

H. melanophrys is a large, long-tailed, big-eared species, somewhat recalling the general aspect of H. californicus, from which, however, it differs greatly in coloration, and especially in cranial character, the skull being much heavier and much broader in proportion to its length, with the rostral portion greatly thickened, in comparison with the same part in H. californicus. There are also well-marked differences in dentition and in the form of the palatal region; the auditory bullæ are smaller and more spherical, and the condylar portion of the lower jaw is much broader, heavier, and less depressed.

Hesperomys (Vesperimus) affinis, sp. nov.

Hesperomys (Vesperimus) melanophrys Cones, Mon. N. Am. Roden., 1877, p. 102 (in part only).

Similar to typical H. leucopus in size, proportions, and cranial characters, but with a close general resemblance in coloration to H. melanophrys Coues.

Above brownish fulvous varied with blackish, darker along the median line, more fulvous along the sides. Below white, with a very slight tinge of yellow. Feet dull white; ears brownish, narrowly edged with white; tail brown, indistinctly lighter below, scantily haired.

Measurements (approximate from skins): head and body, 81.3 to 88.9; tail, 76 to 83; hind foot (including claws), 19.8; ear from crown, 4.5 to 4.8 millimeters. Skull: total length, 26.4; basal length, 25.9 millimeters; greatest width, 13.5; length of nasals, 11.4; lower jaw (from tip of incisors to condyle), 16; height (angle to condyle), 6.4 millimeters.

Type, No. 7382/8665, U. S. National Museum, ♀ ad., Barrio, Tehuantepec, Mexico, October 30, 1868, Prof. F. Sumichrast. (This specimen presents a soiled grayish appearance below, evidently accidental.)

Two other specimens (& ad., No. $\frac{9389}{8670}$, U. S. National Museum; ?? juv., No. $\frac{9383}{8666}$, U. S. National Museum, same locality and collector, October, 1868), are similar above, but one almost wholly lacks the faint

yellowish tinge below plainly seen in the others, which, however, I suspect may be due to soiling.

In the type the teeth are much worn, indicating full maturity.

This form is evidently a member of the *leucopus* group of Vespermice, having the same pattern of coloration as regards the extension of the dark color of the dorsal surface upon the limbs. The relative length of the tail to the length of the head and body is about the same as in *leucopus* proper, the tail being longer than in the *sonoriensis* group, although the color is not much different from occasional specimens of what is usually known as *sonoriensis*. It has, however, a longer hind foot, and the facial portion of the skull is longer and narrower than in average specimens of either *leucopus* or *sonoriensis*.

The specimens here under notice were provisionally referred by Dr. Coues to his *H. melanophrys*, in his supplementary note to his account of that species in "Monographs of North American Rodentia," p. 305, as fully explained above.